THE "UGLY TWINS": FAILED GLOBAL SOURCING PROJECTS AND THEIR SUBSTITUTES

Competitive paper for the 26th IMP conference in Budapest, 2010

HOLGER SCHIELE
University of Twente
School of Management and Governance
P.O. Box 217; NL-7500 AE Enschede, The Netherlands
Phone: +31-53-489 5615
FAX: + 31-53-489 2159
e-mail: h.schiele@utwente.nl

PHILIPP HORN*
Jacobs University Bremen
School of Humanities and Social Sciences/
Integrated Social Sciences
Campus Ring 1, DE-28759 Bremen, Germany
e-Mail: p.horn@jacobs-university.de

WELF WERNER
Jacobs University Bremen
School of Humanities and Social Sciences/
Integrated Social Sciences
Campus Ring 1, DE-28759 Bremen, Germany
e-Mail: w.werner@jacobs-university.de

*corresponding author

ABSTRACT

Purpose of the paper and literature addressed: Analyzing the impact of failed global sourcing projects on the entire commodity group and exploring isomorphism as potential antecedent to the observed phenomenon. The paper is embedded in the global sourcing literature, as well as isomorphism and total cost analysis.

Research method: Secondary data analysis.

*Research findings:*1) Each failed global sourcing project had an "ugly twin", i.e. the material which was not delivered by the new supplier had to be purchased from another supplier, usually the old supplier which was meant to be replaced. This re-sourcing was associated with poorer commercial conditions. 2) Higher savings expectations corresponded with lower realization rate. We interpret this finding as an expression of the presence of mimetic isomorphism.

Main contribution: Exposing the "ugly twins" and empirically testing the isomorphism assumption. Findings ask to expand total cost calculations by including the costs of failed projects. Global sourcing benefits may be over-estimated by previous studies, as they do not seem to deduce the costs of failed projects from overall savings. Firms are alerted that unrealistically high savings expectations are very likely to result in disappointment. Thus projects should preferably be avoided.

Keywords: global sourcing, low cost country sourcing, isomorphism, China, sourcing strategy, purchasing

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Introduction

Currently, most companies engage in global sourcing in some form and to some extent. The importance of global sourcing is steadily rising, both in business (Steinle and Schiele, 2008, Trent and Monczka, 2003b), as well as in scholarly research (Quintens et al., 2006). Among the various reasons why companies choose to source globally, three main motivations appear: 1) Cost savings, e.g. due to lower factor costs, such as wages or currency influences; 2) The procurement of highly innovative products or technology that companies otherwise would not get hold of; 3) Promoting sales activities in the sourcing region (Schumacher et al., 2008, Smith and McCulloch, 1776, Trent and Monczka, 2003b, Smith, 1999, Barney, 1999, Bozarth et al., 1998). Earlier research (Trent and Monczka, 2003b, Handfield, 1994, Monczka and Giunipero, 1985, Spekman, 1991) and a survey conducted by "Lionbridge Localisation Services" (2006) sees a clear focus on the cost saving aspects of global sourcing (56% of all survey participants engage in global sourcing solely for this reason, particularly for western based companies).

However, previous findings are discordant what concerns the success in cost savings through global sourcing. While substantial differences in factor costs such as labor or capital expenses should lead to lower prices companies aim for, managers as well as scholars highlight the difficulty to calculate the objective value of global initiatives (Trent and Monczka, 2003b, Horwell and Soucy, 2007). Favourable factor costs do not automatically translate into lower sourcing costs. Findings on the actual cost saving benefits from global sourcing vary greatly and range from zero (Kotabe and Omura, 1989, Murray et al., 1995) to savings of 20% (Alguire et al., 1994, Petersen et al., 2000, Trent and Monczka, 2003b). Some major consultancy companies suggest potential savings of up to 60% for certain products (e.g. BCG 2007).

These ambiguous findings may have to do with methods of analysis applied and the unclear basis of analysis chosen. It has been argued that a key issue is that with the previous studies it remains

unclear whether they *"deduct the costs of failed global sourcing activities from savings generated by successful ventures?"* (Steinle and Schiele, 2008, p. 4). These studies are survey results which did not explicitly ask the respondents to differentiate accordingly. Assessing savings results through surveys may also pose serious reliability issues, as firms may not measure savings in a uniform way (Ketokivi and Schroeder, 2004). Moreover, the typical unit of analysis is the project. However, a project perspective may concentrate on understanding the success of single projects, but does not necessarily analyse what is the impact of projects on the overall organisation. What happens, if a global sourcing project fails to meet the expectations and the awarded supplier does not deliver the ordered material or the quality is not satisfactory? The material will need to be sourced from somewhere else, presumably to less favourable conditions than originally expected from the global sourcing project. The first objective of this study, therefore, is to fill this gap in previous research and analyse the effects of global sourcing project explicitly taking into account failed projects, as well.

Apart from the three "classic" reasons for global sourcing ventures, recent literature has tried to explain some of the global sourcing trend with psychological leader-follower effects (Kotabe and Mol, 2006). In such cases of mimetic isomorphism (DiMaggio and Powell, 1983) (Di Maggio and Powell, 1983, p. 152)market actors in a occurrence of cognitive simplification (Reger and Huff, 1993) copy an industry recipe (global sourcing), seemingly taking beneficial, rational and safe decisions (Spender, 1989). Similar effects have also been described as so-called bandwagoning effects (Schweller, 1994). While the potential presence of isomorphistic antecedents of global sourcing has been discussed in previous research, empirical evidence for this phenomenon is still missing. A second objective of this paper is to analyse such evidence.

In order to explore the impact of failed global sourcing projects and isomorphism as a possible antecedent we analyze a database scrutinizing the top 80% of China sourcing ventures from a Western European automotive OEM. Using objective data from one single firm avoids the reliability issues associated with survey responses. Data used for the analysis include expected savings from global sourcing, realised success rate expressed as call-offs against the contract and direct costs of failed projects across a commodity group.

Dissecting the relationship between these variables the following key findings emerge:

1. The failed global sourcing projects had "ugly twins". The unfulfilled contract awarded to a new supplier has to be taken over by the old and established suppliers, which leads to less favourable conditions. We call these replacement contracts ugly twins. Assessing global sourcing success, these extra costs have to be deduced from alleged savings from global sourcing projects. In our sample these costs were substantial. This suggests that in previous literature the benefits of global sourcing might have been overestimated, because the costs of failed global sourcing projects have not been explicitly deduced from the benefits gained from successful projects.
2. Moreover, findings revealed a negative and significant relation between expected savings and global sourcing project success. In those commodities where global sourcing contracts with very low prices were signed, on average the subsequent call-offs were very low and resulted in ugly twins. A possible explanation for this observation could be found in mimetic isomorphism effects. Many global sourcing projects could mainly have been started because of "leader-follower effects", even if global sourcing was not the most adequate strategy in that particular situation (Kotabe and Mol, 2006).

This paper is organized as follows: we first discuss the concepts of global sourcing drawing particular attention to isomorphism; then will present our method of analysis and the empirical results, in order to finally discuss some implications from the observed phenomena.

Literature Background

Global Sourcing Literature

The fundamental concept behind cost oriented cross-border sourcing stems from the idea of lower factor costs e.g. labour, material and tax, resulting in lower comparative price levels in certain countries (Porter, 1990). The concept of comparative advantage was introduced as early as 1776 by Smith and later Ricardo (1817), stating that certain countries could produce a particularly good service at a lower opportunity cost. More precisely the concept refers to the ability to produce a product most efficiently given all the other products that could be produced.

Companies can benefit from those differences by allocating activities of the value chain to those regions, hence reducing cost and increasing customer value (Kogut, 1985). Facilitated by easy communication, travel and the removal of trade barriers etc. within the course of globalisation, firms are increasingly seeking to take advantage of the above mentioned lower factor costs, e.g. by global, international and low cost country sourcing (Kotabe and Murray, 1990, Bozarth et al., 1998, Steinle and Schiele, 2008, Hartmann et al., 2008)

Definitions for, and the understanding of, the term global sourcing and its sub-categories still differ. Quintens et al. (2006) exemplarily list six key which have partly been delineated and partially been used interchangeably, viz.: "global sourcing" (Kotabe, 1998), "international purchasing" (Motwani and Ahuja, 2000), "worldwide sourcing" (Monczka and Trent, 1992), "import sourcing" (Swamidass, 1993), "offshore sourcing" (Frear et al., 1992) and "international procurement" (Scully and Fawcett, 1994).

The genesis of the scientific approximation to firms engaging in cross-border sourcing has not been a clear or unidirectional process. During the late 80s and early 90s research mainly focused on international sourcing with a clear cost reduction aspect (Trent and Monczka, 2003b). However, sourcing ventures aiming at unit cost reduction, following a classical sourcing approach (Alguire et al., 1994), did not necessarily lead to an overall cost advantage of the firm (Levy, 1995). Taking the apparent necessity to embed international sourcing ventures into a broader organisational strategy, the term "global sourcing" evolved.

Indeed, most scholars coining and utilising the term highlighted the integrative and broader strategic aspect of global sourcing. Kotabe and Murray claim global sourcing to be the management of logistics, research and development (R&D), manufacturing and marketing on a global basis (2004). Trent and Monczka (2003a) furthermore distinguish classical international purchasing and global sourcing. Within this last definition, international sourcing implies the exploitation of comparative advantage of countries with lower factor costs, albeit not necessarily within the scope of a larger strategic setup as would imply global sourcing. During the past few years, an increasing number of scholars have opened up a further subset under the umbrella of the term global sourcing, coined "low cost country sourcing" (e.g. Lockström, 2007, Hartmann et al., 2008, Ruamsook et al., 2009).

Since our research objective aims at understanding the dynamics of the system during the course of this paper we utilise the term global sourcing as an umbrella term for international sourcing, worldwide sourcing, low cost country sourcing etc.

Isomorphistic Behavior Patterns in Global Sourcing

Scholarly research has identified a large number of reasons for why firms engage in global sourcing. As explained above those reasons mainly fall under either one of the subsets: cost saving, procurement of innovative products and the promotion of sales activities. Recent research has started to look into the possibility to pinpoint global sourcing ventures to so-called of "leader-follower effects"(Kotabe and Mol, 2006), also referred to as band wagon effects (Schweller, 1994)

Global sourcing has become one the most broadly discussed topic within firms in industrial countries (Steinle and Schiele, 2008). Within a survey performed by Bovet and Martha (2000), around 95% of CEOs declared going global to be their prime challenge on a mid- to long term planning horizon. Even the setup of distinct global sourcing quotas has been reported (Steinle and Schiele, 2008). In some firms top-management imposes international sourcing quotas, "*which often means that the companies source to achieve budget goals.*" (Fredriksson and Jonsson, 2009), p. 228). Apparently, among managers there seems to be an almost dogmatic view about the benevolent effects of global sourcing.

Expanding the above mentioned reasons for global sourcing, research has pinpointed some of the reasons for an ever increasing global sourcing tendency to isomorphistic phenomena, in which copying an industry recipe seems to lead to rational and safe decisions (Spender, 1989).

It therefore seems, that *"internationalization of sourcing is not only a strategic choice but to some extent also an imperative dictated by industry competitors"* (Mol et al., 2002, p. 8). Indeed, with many trends it can be observed that firms are mimicking each others' behaviour (on mimicking IT outsourcing see Lacity & Hirschheim, 1995).

Early research regarding isomorphistic behavioural patterns has been carried out by Di Maggio and Powell (1983), distinguishing three occurrences. Firstly coercive isomorphism in which one dominant player uses its power to force other players into similar behavioural patterns. Secondly, mimetic isomorphistic patterns can be observed in which autonomous players copy each others behaviour. Thirdly, normative isomorphism develops as a field matures and can be described as *"the collective struggle of members of an occupation to define the conditions and methods of their work"* (Di Maggio and Powell, 1983, p. 152). The imitation process results in heuristic decision making with borrowed experience and a strong degree of cognitive simplification (Reger and Huff, 1993). It can ultimately lead to the development of an industry recipe (Spender, 1989) which actors of a certain group follow and which will lead to a strong accordance regarding method, structure and results of strategy decision (Ghoshal, 1988).

The question arises if mimetic isomorphistic (bandwagon) phenomena negatively influence purchasing performance since they induce purchasing managers to engage in potentially deficient global sourcing projects? If global sourcing is conceived as an industry receipt resulting from coercive isomorphism, it could be expected that the receipt's recommendations are also applied in situations where the original assumptions do not hold, resulting in unrealistically high expectations. Based on this logic we hypothesize:

H1: high savings expectations are negatively correlated with the successful completion of a global sourcing project

Measuring Success in Global Sourcing through a commodity based total cost perspective

By and large, global and international sourcing can still be considered an under-researched topic (Kaufmann and Carter, 2006) and despite its growing importance, a number of problems remain unresolved (Trent and Monczka, 2003b). Research has shown that managers indeed often perform global sourcing under short term cost advantages goals, omitting the idea of long term sustainable competitive advantage and total cost reduction (Murray, 2001, Petersen et al., 2000, Alguire et al., 1994). While some research has been carried out with regards to the effects of global sourcing on the firm, the ambiguous results as pictured above warrant further study. As earlier survey research lays out, also firms struggle strongly to calculate the fiscal effects of their sourcing operations (Innes and Mitchell, 1998, Cokins, 2001). As remedy, since more than a decade, it has been suggested to employ a total cost of ownership (TCO) approach (Ellram and Perrott Siferd, 1993, Ellram, 1995, Cavinato, 1992).

The big issue with a total cost approach is to identify the most relevant costs out of a multitude of potential cost elements. Ferrin and Plank (2002), for instance, asked 115 purchasing managers and came up with a list of 247 specific total cost drivers. They group them into categories which include

initial and operations costs, logistics, maintenance, quality and costs associated with supplier reliability and capability (or, more precisely, the lack of those). Extrapolating this latter reasoning it can be asked to include those costs into a total cost analysis which result from a complete failure of the chosen supplier to deliver results.

The idea to include the costs of failed projects into a total cost evaluation gains further support if a commodity perspective is taken. The term "commodity" is not to be mixed up with the definition of commodities as a description of raw materials or simple goods. Instead, commodities are general categories or families of purchased items (Monczka et al., 2008, Rendon, 2006) In order to apply a commodity based strategic approach, similar material or services purchased need to be congregated into one group (Boutellier and Zagler, 2000). One purchasing manager will be responsible for the whole commodity group. Therefore, within this approach first a commodity strategy is defined and then suppliers are searched that fit (Trent and Monczka, 2002, Kalbfuß and Rüdrich, 2004, Eßig and Wagner, 2003). In other words: following a commodity based approach not a single supplier is seen in isolation, but the entire commodity of similar purchasing goods. These goods may be bought from several suppliers, which is typical for a multiple sourcing strategy as opposed to a single sourcing strategy (Treleven and Bergman Schweikhart, 1988). Being responsible for the supply of a commodity, a purchaser might have to ask the question of what happens, if the chosen supplier fails to deliver, i.e. if serious "reliability and capability" problems occur? The answer is that the material in question has to be purchased somewhere else, since it is needed in the production process of the buying firm. These emergency sourcing activities lead to the "ugly twins", volumes that have to be covered from different suppliers, presumably at less favourable conditions.

Transferring this idea to our topic of analysis, global sourcing, the question arises of what is the impact of failed global sourcing project on the commodity group as a whole? We hypothesize the following:

> H2: Failed global sourcing projects will have a negative impact on the material group as a whole and induce higher cost a different stages.

Analysis

Data and Methodology

Building on the above body of knowledge and in this field of interest, we draw upon a positivistic approach within the frame of a quantitative data analysis (Croom, 2009). We set out to test the above developed hypothesis deducted from literature.

Earlier research (e.g. Kotabe and Omura, 1989, Murray et al., 1995, Alguire et al., 1994, Petersen et al., 2000, Trent and Monczka, 2003b) has shown that the appraisal of sourcing strategy and results tend to differ strongly depending on the subject of research and whether or not a survey research is applied as the predominant method of research. We therefore draw on a secondary data from one focal company, following the definition of secondary data by Cowton (1998).

Scientific information can be gathered from primary and secondary channels (Cooper, 1998). Whereas primary channels consist of data specifically gathered for the research, secondary channels provide data about information gathered for other reasons and can e.g. be obtained by data mining from a company data warehouse (Giudici, 2003). One problem of secondary data analysis is the likelihood to "map only approximately onto the researcher's research questions" (Cowton, 1998, p. 429). In order to overcome this, data gathered was extracted in a carefully designed data mining process within the data warehouse of the focal company. Data mining is a process to select, explore and model large quantities of data from the data warehouse available according to the aims of the analysis (Giudici, 2003, p. 23). The data warehouse of the focal company contains a vast amount of information consisting of an approximate 16 million sets of data. For this research, the data about the company's global sourcing initiatives was specifically gathered and collated as a conjunction between a large array of data in order to contextualise the relationship between global sourcing evaluation and commodity group. In total, a sample of 68 sourcing projects resulted.

Applying a wide set of filters prior to the analysis helps to control for disturbances. The data is less likely to be influenced by a large set of moderators to global sourcing (e.g. as summarized by

Quintens et al. 2006) such as product attributes, firm management differences, network influences, industry field and environment influences.

Our set of filters applies as follows: firstly, during the course of the study, the perspective of a western based organisation engaging in global sourcing activities is taken.

Secondly, we concentrate on one industry within one cultural context. We follow Taylor and Taylor (2008) who claim that the automotive industry is of special important to the world economy and continues to globalise and therefore demands continued attention from operations management researchers.

Thirdly, the product focus within our research solely lies in production material, i.e. products actually being built into the vehicles, thus dampening the effects of product specification and attributes.

The fourth filter consists of analysing only one single sourcing market, China. In this way we avoid distortions through cultural and macroeconomic aspects, thus increasing the comparability of analysed projects.

Finally, it has furthermore been argued, that operations research should be conducted in close connection to business, or, as Karlsson puts it: ”the connection to practice makes relevance a major criterion for good operations management research” (Karlsson, 2009, p. 13). Therefore we conclude that using this data gathered in a business context will reduce the likelihood of the results of the analysis being considered irrelevant and that it should at the same time provide a high degree of validity.

We used the SPSS software package to perform the statistical analyses.

Results

Display of results

The results section is divided into two main fields, firstly an overall appraisal of the success of global sourcing projects and secondly a deeper assessment of the effects of failed global sourcing projects. The sets of data will enable us to test our two hypotheses, notably: do isomorphistic behaviour patterns influence the success of global sourcing and to what extent do failed global sourcing projects have an effect on the success of the commodity group.

In particular, our research is based on an analysis of the top 80% of the focal car maker’s low wage country sourcing ventures from China from a time span of two years. Data points are scattered along two axes. In the following Illustration 1 the X-axis is made up by the savings as they follow from the contract closed with the low cost country supplier. The savings are calculated by comparing the price of the purchased commodity(s) to the new price as negotiated. The Y-axis depicts the call-offs, i.e. if the exact amount of scheduled units is actually delivered than the call-off is 100%.

Secondly we applied a four quadrant matrix to the data in order get an improved understanding about the success of the projects. The quadrants are divided by two lines, savings and realisation level. From interviews with procurement managers and China sourcing staff within the OEM analysed, we reasoned that call off ratios below 75% would indicate a certain degree of problem within the project. Projects from commodities below that line fall into the fail zone (quadrants III and IV in Figure one) Secondly we reasoned that projects below a 5% savings range would only make sense under the strategic viewpoint of braking up monopolies but would elsewise not be beneficial due to increased process cost and risk. Such savings fall in the normal range of annual price decreases which are also achieved with the traditional suppliers (quadrant in Figure One). Successful projects fall into quadrant II, high savings coinciding with high call-offs, i.e. the buying firm realising savings.

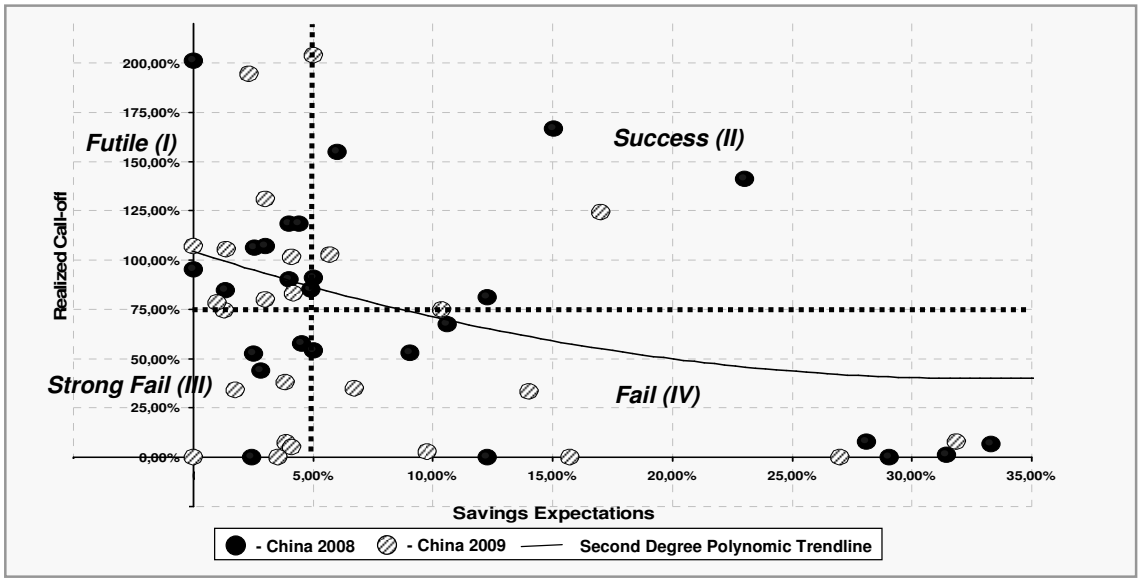

Figure 1: High Expectations Correspond to Low Realisation

Appraisal of overall global sourcing project success

Data points from the sourcing ventures were plotted in the matrix. Data points with reduced call off ratios due to reduced number of vehicles sold or changed requirements were removed from the analysis, reducing analysed projects by four to 54. Each data point represents one purchasing decision on component level.

As the graphic shows, only seven projects (13%) provided satisfactory results in terms of savings and call-off ratio. Furthermore, it can be observed that the higher the projected savings are, the lower the actual ratios of called off to projected volumes were. Within the small sample it turned out, that projects with estimated savings between 0% and 5% tended to have quite a good chance of running successfully while projects with above 5% mainly stayed behind in terms of good received. All projects with more than 25% expected savings failed.

Our first hypothesis stated that global sourcing can to a certain degree be associated with mimetic isomorphistic behaviour patterns. Since global sourcing is considered a powerful sourcing tool by managers and scholars alike, we suggest the idea that purchasing managers engage in global sourcing willingly, following a shared pattern of belief of global sourcing success.

Our data indicates that a high savings expectation is associated with a higher probability of failure. It seems, managers support decisions without discerning moderating factors and problems that can lead to a failure of the project. A more realistic analysis seems to lead to lower savings expectations, while those projects not analysing properly their particular situation and relying on the industry receipt seem to be more likely to fail. The correlation analysis executed supports the visual analysis unveiling a correlation coefficient of – 0.356 which is significant at 1% level (two tailed). Thus, based on our data hypothesis 1 is not rejected.

Examination of failed sourcing projects

Secondly the direct and quantifiable results of failed global sourcing projects were scrutinised. In order to do so, the failed sourcing projects, i.e. those located in quadrants III and IV, were analysed for their negative impact.

Since the OEM's production line had to keep running, volumes from failed global sourcing projects had to be allocated to established suppliers. Given short lead times, and a unfavourable negotiating position we estimated that returning to the fold of the established supplier would imply costs. We name those replacement contracts "ugly twins" and suggest that in order to measure global

sourcing success, these extra costs have to be deduced from alleged savings from global sourcing projects.

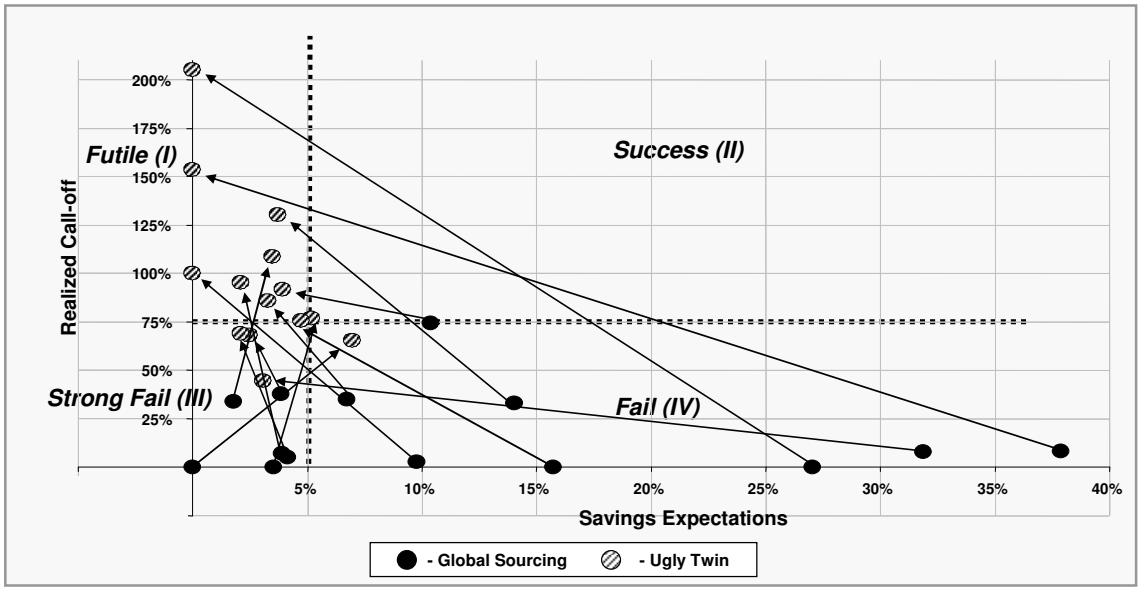

Figure 2: Failed global sourcing projects have an "Ugly Twin"

For greater clarity only projects from 2009 were analysed. Since our focal company had to keep up production despite the low cost country supplier not delivering, the commodity group was analysed in order to depict the direct financial impact of the global sourcing venture. From the 14 projects analysed, all but two projects resulted in unfavourable conditions compared to the originally planned outcome of the purchase. As mentioned above, our second hypothesis concerned the negative effects of global sourcing ventures under a commodity group perspective. We cannot therefore reject hypothesis two, the failure of global sourcing ventures does indeed lead to unfavourable buying conditions with established supplier. From a total cost perspective it becomes clear that the costs of failed projects have to be deduced from possible benefits.

Discussion and Limitations

We ground our research on the recognition of various observations from literature, firstly an increasing tendency towards global sourcing within firms in a western surrounding due to leader-follower effects, secondly, the still ambiguous results of those ventures and thirdly the necessity to engage in a commodity group perspective for global sourcing. We therefore set out to test the two hypotheses concerning that high savings expectations are negatively correlated with the successful completion of a global sourcing project and that failed global sourcing projects will have a negative impact on the material group as a whole and induce higher cost a different stages.

Regarding the first, based on assumptions deducted from literature about isomorphistic (leader-follower) patterns within social networks we find support for our hypothesis that high savings expectations are indeed negatively correlated with the successful completion of a project.

The complex nature of global sourcing strategy generate various barriers to the successful execution of it (Kotabe et al., 2009, e.g.:Fraering and Prasad, 1999, Trent and Monczka, 2003b, Horwell and Soucy, 2007). Quintens et al. (2006) divide the issues firms have to face into five categories, product, firm management, network, industry competition and environment (for a detailed list of factors please refer to Quintens et a. 2006). Due to the setup of our analysis as mentioned above, we have ruled out the majority of barriers and moderators to global sourcing success. From the five factors brought up we could rule out product specific influences since there was no apparent

pattern regarding product complexity influences on the success of the project. Secondly, management factors frequently mentioned as important (Trent and Monczka, 2003b, Ellram, 1991, Scully and Fawcett, 1994), such as lack of resources or nationalistic behaviour could be eliminated due to the high maturity degree of the organisation. Thirdly, network issues such as finding suitable suppliers were not playing a role, as we did not analyse the supplier search process. As a fourth moderator, industry competition factors such as broker fees or the intensity of foreign competition did not seem to play a role either. Finally, since all project (failed and non-failed) came from one single foreign country, we could exclude environmental aspects.

We therefore reason that a certain degree of unsuccessful projects can indeed be attributed to isomorphistic phenomena in a sense that projects were started despite an apparent congenital defect.

Concerning the second hypothesis we argue that taking a commodity group perspective is a crucial element when evaluating and performing global sourcing projects. Failed projects will entail negative effects for the commodity group in particular and the organisation as a whole, since a failed global sourcing project is likely to have an ugly twin.

The outcome of the study has several managerial implications. First, we suggest to pay additional attention when global sourcing projects seem particularly promising, since they might not entail all barriers and moderators and might be owed to the following of a pseudo-beneficial industry recipe. While the absolute magnitude of savings threshold may depend on the industry, the idea of not buying from the cheapest but rather from the second cheapest seller comes into mind.

Secondly, we suggest managers to include commodity spanning calculation methods when analysing global sourcing ventures. Sourcing projects should not be seen and evaluated in isolation.

Our study broadens the knowledge base on the importance of commodity group based strategic sourcing. It furthermore sets light into some of the reasons for the continuing ambiguity about global sourcing success.

This study also contributes to expand the theory on total cost of ownership, by demonstrating the need to include cost of failed projects as well. Literature so far has been omitting these types of cost, but – generalising from global sourcing – it might be a general requirement to include a cost position for failures in a total cost calculation. Further, our study broadens the knowledge base on the importance of commodity group based strategic sourcing. It furthermore sets light into some of the reasons for the continuing ambiguity about global sourcing success.

Despite interesting findings, our study also implies some limitations. Findings were gathered using a small-meshed set of filters, potentially setting a limit to external validity in different e.g. industry surroundings, firm size, countries sourced from, product structures etc. Secondly, despite a significant correlation, the number of cases sets some limitations to the study.

Thirdly, the correlation between high savings and a high probability of project failure warrants further study in terms of a causal relationship. In accordance with Qintens et al. (2006) we suggest that case studies would be of particular valuable to further enrich the body of knowledge on global purchasing in general. In this particular case however, social desirability influences (Crowne and Marlowe, 1960) might prove case by case verification of the observed phenomenon a potentially unpromising venture.

References

ALGUIRE, M., FREAR, C. & METCALF, L. 1994. An examination of the determinants of global sourcing strategy. *Journal of Business and Industrial Marketing,* 9**,** 62-74.

BARNEY, J. 1999. How a firm's capabilities affect boundary decisions. *Sloan Management Review,* 40**,** 137.

BCG & FOCUS 2007. Sourcing from China. *Self Edited*.

BOUTELLIER, R. & ZAGLER, M. 2000. *Materialgruppenmanagement und Einkaufskooperationen [material group management and purchasing cooperations],* Muenchen, Hanser.
BOVET, D. & MARTHA, J. 2000. *Value Nets: Breaking the Supply Chain to Unlock Hidden Profits,* New York, NY, John Wiley & Sons.
BOZARTH, C., HANDFIELD, R. & DAS, A. 1998. Stages of global sourcing strategy evolution: an exploratory study. *Journal of Operations Management,* 16**,** 241-255.
CAVINATO, J. 1992. A total cost/value model for supply chain competitiveness. *Journal of Business Logistics,* 13**,** 285-285.
COKINS, G. 2001. *Activity-based cost management: an executive's guide,* Burr Ridge, John Wiley & Sons.
COOPER, H. 1998. *Synthesizing research: A guide for literature reviews,* London, Sage Publications, Inc.
COWTON, C. J. 1998. The use of secondary data in business ethics research. *Journal of Business Ethics,* 17**,** 423-434.
CROOM, S. 2009. Introduction to research methodology in operations management. *In:* KARLSSON, C. (ed.) *Researching Operations Management.* New York and London: Routledge.
CROWNE, D. & MARLOWE, D. 1960. A new scale of social desirability independent of psychopathology. *Journal of consulting psychology,* 24**,** 349-354.
DI MAGGIO, P. & POWELL, W. 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review,* 48**,** 147 - 160.
ELLRAM, L. 1991. Key success factors and barriers in international purchasing partnerships. *Management Decision,* 29**,** 38-44.
ELLRAM, L. 1995. Activity-based costing and total cost of ownership: a critical linkage. *Journal of Cost Management,* 8**,** 22-30.
ELLRAM, L. & PERROTT SIFERD, S. 1993. Purchasing: the cornerstone of the total cost of ownership concept. *Journal of Business Logistics,* 14**,** 163-163.
EßIG, M. & WAGNER, S. 2003. Strategien in der Beschaffung [strategies in purchasing]. *Zeitschrift für Planung & Unternehmenssteuerung,* 14**,** 279-296.
FERRIN, B. & PLANK, R. 2002. Total cost of ownership models: An exploratory study. *Journal of Supply Chain Management,* 38**,** 18-29.
FRAERING, M. & PRASAD, S. 1999. International sourcing and logistics: an integrated model. *Logistics Information Management,* 12**,** 451-459.
FREAR, C., METCALF, L. & ALGUIRE, M. 1992. Offshore sourcing: its nature and scope. *International Journal of Purchasing and Materials Management,* 28**,** 2-11.
FREDRIKSSON, A. & JONSSON, P. 2009. Assessing consequences of low-cost sourcing in China. *International Journal of Physical Distribution & Logistics Management,* 39**,** 227-249.
GHOSHAL, S. 1988. Environmental scanning in Korean firms: organizational isomorphism in action. *Journal of International Business Studies,* 19**,** 69-86.
GIUDICI, P. 2003. *Applied data mining,* Padova, J. Wiley.
HANDFIELD, R. 1994. US global sourcing: patterns of development. *International Journal of Operations and Production Management,* 14**,** 40-40.
HARTMANN, E., BALS, L. & KAISER, G. 2008. The impact of internal purchasing resources and capabilities on low-cost country sourcing. *Zeitschrift für Betriebswirtschaft,* 78**,** 31-54.
HORWELL, R. & SOUCY, S. 2007. Determining the real costs of doing business in a global market. *National Productivity Review,* 10**,** 157-165.

INNES, J. & MITCHELL, F. 1998. *A practical guide to activity-based costing,* London, Kogan Page.
KALBFUß, W. & RÜDRICH, G. 2004. *Materialgruppenmanagement,* Wiesbaden, Gabler.
KAUFMANN, L. & CARTER, C. R. 2006. International supply relationships and non-financial performance - A comparison of US and German practices. *Journal of Operations Management,* 24**,** 653-675.
KETOKIVI, M. A. & SCHROEDER, R. G. 2004. Perceptual measures of performance: fact or fiction? *Journal of Operations Management,* 22**,** 247-264.
KOGUT, B. 1985. Designing global strategies: Comparative and competitive value-added chains. *Sloan Management Review,* 26**,** 15-28.
KOTABE, M. 1998. Efficiency vs. effectiveness orientation of global sourcing strategy: A comparison of US and Japanese multinational companies. *The Academy of Management Executive,* 12**,** 107-119.
KOTABE, M., MOL, M. & MURRAY, J. 2009. Global sourcing strategy. *In:* KOTABE, M. & HELSEN, K. (eds.) *The SAGE Handbook of International Marketing.* London: Sage Publications Ltd.
KOTABE, M. & MOL, M. J. 2006. International sourcing: Redressing the balance. *In:* MENTZER, J., MYERS, M. & STANK, T. (eds.) *Handbook of Global Supply Chain Management.* London: Sage Publications.
KOTABE, M. & MURRAY, J. 1990. Linking Product and Process Innovations and Modes of International Sourcing in Global Competition: A Case of Foreign Multinational Firms. *Journal of International Business Studies,* 21.
KOTABE, M. & MURRAY, J. 2004. Global sourcing strategy and sustainable competitive advantage. *Industrial Marketing Management,* 33**,** 7-14.
KOTABE, M. & OMURA, G. 1989. Sourcing strategies of European and Japanese multinationals: A comparison. *Journal of International Business Studies,* 20**,** 113 - 130.
LACITY, M. & HIRSCHHEIM, R. 1995. *Beyond the information systems outsourcing bandwagon: the insourcing response,* Chichester, John Wiley & Sons, Inc. New York, NY, USA.
LEVY, D. 1995. International sourcing and supply chain stability. *Journal of International Business Studies,* 26**,** 343 - 360.
LIONBRIDGE 2006. Global Sourcing: Seeing Beyond Cost Savings to Capture Sustaining Value.
LOCKSTRÖM, M. 2007. *Low-Cost Country Sourcing: Trends and Implications,* Wiesbaden, Duv, Gabler Edition Wissenschaft.
MOL, M., TULDER, R. & BEIJE, P. 2002. Global sourcing fact or fad. *Research Paper*.
MONCZKA, R. & GIUNIPERO, L. 1985. International purchasing: characteristics and implementation. *The International Executive,* 27**,** 11.
MONCZKA, R., HANDFIELD, R. & GIUNIPERO, L. 2008. *Purchasing and supply chain management,* Mason, OH, South-Western Educ Pub.
MONCZKA, R. & TRENT, R. 1992. Worldwide sourcing: assessment and execution. *International Journal of Purchasing and Materials Management,* 28**,** 2-9.
MOTWANI, J. & AHUJA, S. 2000. International purchasing practices of US and Indian managers: a comparative analysis. *Industrial Management and Data Systems,* 100**,** 172-179.
MURRAY, J. 2001. Strategic alliance-based global sourcing strategy for competitive advantage: a conceptual framework and research propositions. *Journal of International Marketing,* 9**,** 30-58.

MURRAY, J., KOTABE, M. & WILDT, A. 1995. Strategic and financial performance implications of global sourcing strategy: a contingency analysis. *Journal of International Business Studies,* 26**,** 181-202.

PETERSEN, K., PRAYER, D. & SCANNELL, T. 2000. An empirical investigation of global sourcing strategy effectiveness. *The Journal of Supply Chain Management,* 36**,** 29-38.

PORTER, M. 1990. *The Competitive Advantage of Nations: with a New Introduction,* New York, NY, Free Press.

QUINTENS, L., PAUWELS, P. & MATTHYSSENS, P. 2006. Global purchasing: State of the art and research directions. *Journal of Purchasing and Supply Management,* 12**,** 170-181.

REGER, R. & HUFF, A. 1993. Strategic groups: A cognitive perspective. *Strategic Management Journal,* 14**,** 103-123.

RENDON, R. 2006. Commodity sourcing strategies: processes, best practices, and defense initiatives. *In:* GARRET, G. & RENDON, R. (eds.) *US Military Program Management: Lessons Learned and Best Practices.* Leesburg Pike Management Concepts Inc.

RICARDO, D. 1817. Principles of political economy. *Cambridge: Cambridge*.

RUAMSOOK, K., RUSSELL, D. & THOMCHICK, E. 2009. Sourcing from low-cost countries. *The International Journal of Logistics Management,* 20**,** 79-96.

SCHUMACHER, S., CONTZEN, M., SCHIELE, H. & ZACHAU, T. 2008. *Die 3 Faktoren des Einkaufs: Einkauf und Lieferanten strategisch positionieren [The three factors of purchasing: strategic positioning of purchasing and suppliers],* Weinheim, Wiley - VCH Verlag.

SCHWELLER, R. 1994. Bandwagoning for profit: Bringing the revisionist state back in. *International Security***,** 72-107.

SCULLY, J. & FAWCETT, S. 1994. International procurement strategies: Challenges and opportunities for the small firm. *Production and Inventory Management,* 35**,** 39 - 46.

SMITH, A. & MCCULLOCH, J. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations*, Adam and Charles Black.

SMITH, J. 1999. Item selection for global purchasing. *European Journal of Purchasing & Supply Management,* 5**,** 117-127.

SPEKMAN, R. 1991. US buyers' relationships with Pacific Rim sellers. *International Journal of Purchasing and Materials Management,* 27**,** 1-10.

SPENDER, J. 1989. *Industry Recipes: An Enquiry Into the Nature and Sources of Managerial Judgement,* Cambridge, MA, Basil Blackwell

STEINLE, C. & SCHIELE, H. 2008. Limits to global sourcing? Strategic consequences of dependency on international suppliers: cluster theory, resource-based view and case studies. *Journal of Purchasing and Supply Management,* 14**,** 3-14.

SWAMIDASS, P. 1993. Import sourcing dynamics: An integrative perspective. *Journal of International Business Studies,* 24**,** 671 - 691.

TAYLOR , M. & TAYLOR, A. 2008. Operations management research in the automotive sector. *International Journal of Operations and Production Management,* 28**,** 480-489.

TRELEVEN, M. & BERGMAN SCHWEIKHART, S. 1988. A risk/benefit analysis of sourcing strategies: single vs. multiple sourcing. *Journal of operations management,* 7**,** 93-114.

TRENT, R. & MONCZKA, R. 2003a. International purchasing and global sourcing - what are the differences? *Journal of Supply Chain Management,* 39**,** 26-36.

TRENT, R. & MONCZKA, R. 2003b. Understanding integrated global sourcing. *International Journal of Physical Distribution and Logistics Management,* 33**,** 607-629.

TRENT, R. J. & MONCZKA, R. M. 2002. Pursuing competitive advantage through integrated global sourcing. *Academy of Management Executive,* 16**,** 66-80.